

IN THE CLAIMS

No claims have been amended, added, or canceled by this paper.

1. (Previously Presented) In a mobile telephone configured for data communications and operative in accordance with a circuit-switched voice service and a packet data service, a method of selecting a cellular base station transceiver system for communication with the mobile telephone comprising the acts of:

scanning, via a cellular radio frequency (RF) transceiver, to identify a plurality of cellular base station transceiver systems available for communication including first and second cellular base station transceiver systems;

measuring, from the scanning, a first energy-to-interference ratio E_c/I_o of the first cellular base station transceiver system;

measuring, from the scanning, a second energy-to-interference ratio E_c/I_o of the second cellular base station transceiver system;

identifying, at the mobile telephone, that the first cellular base station transceiver system provides a Third Generation (3G) or greater communication service;

identifying, at the mobile telephone, that the second cellular base station transceiver system fails to provide the 3G or greater communication service but provides a communication service that is less than the 3G or greater communication service;

if, as identified at the mobile telephone, the first energy-to-interference ratio E_c/I_o is greater than a minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o :

causing the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system based at least in part on identifying that the first cellular base station transceiver system provides the 3G or greater communication service and the second

cellular base station transceiver system fails to provide the 3G or greater communication service.

2. (Previously Presented) The method of claim 1, wherein the second cellular base station transceiver system provides a Second Generation (2G) communication service.

3. (Previously Presented) The method of claim 1, wherein the act of causing the first cellular base station transceiver system to be selected for communication further comprises:

causing the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold and is less than the second energy-to-interference ratio E_c/I_o .

4. (Previously Presented) The method of claim 1, wherein the method is performed at least in part by the mobile telephone and further comprises:

initially establishing communication with the second cellular base station transceiver system; and

wherein the act of causing the first cellular base station transceiver system to be selected for communication comprises the further act of facilitating a handoff to the first cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o .

5. (Previously Presented) The method of claim 1, wherein the method is performed at least in part by the mobile telephone and further comprises:

initially establishing communication with the first cellular base station transceiver system which provides the 3G or greater communication service; and

wherein the act of causing the first cellular base station transceiver system to be selected for communication comprises the further act of refraining from handing-off to the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o .

6. (Previously Presented) The method of claim 1, wherein the method is performed at least in part by the mobile telephone, and further comprises:

wherein the act of causing the first cellular base station transceiver system to be selected for communication comprises the further acts of producing and sending a list of one or more handoff candidate identifiers to a serving cellular base station transceiver system which excludes an identifier for the second cellular base station transceiver system.

7. (Previously Presented) A method of selecting a cellular base station transceiver system for communication, comprising:

scanning to identify one or more cellular base station transceiver systems available for communication with a mobile station;

identifying, at the mobile station, that at least a first cellular base station transceiver system identified from the scanning provides a Third Generation (3G) or greater communication service for the mobile station;

identifying, at the mobile station, that at least a second cellular base station transceiver system identified from the scanning fails to provide the 3G or greater communication service for the mobile station but provides a communication service that is less than the 3G or greater communication service; and

producing and sending a list of handoff candidate identifiers to a serving cellular base station transceiver system which includes a first identifier for the first cellular base station transceiver system but excludes a second identifier for the second cellular base station transceiver system based on identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service.

8. (Previously Presented) The method of claim 7, wherein the acts of producing and sending are performed if, as identified at the mobile station, the first cellular base station transceiver system has a signal quality that is greater than a minimum threshold, even if the signal quality is less than that of the second cellular base station transceiver system.

9. (Previously Presented) The method of claim 7, wherein the second cellular base station transceiver system provides a Second Generation (2G) communication service.

10. (Original) The method of claim 7, wherein the list is sent as part of one of an origination message, a page response message, and a pilot strength measurement message.

11. (Previously Presented) A mobile telephone configured for data communications and operative in accordance with a circuit-switched voice service and a packet data service, the mobile telephone comprising:

- a controller;

- a cellular radio frequency (RF) transceiver coupled to the controller;

- the cellular RF transceiver including a receiver and a transmitter operative for communications with cellular base station transceiver systems;

a user interface for use in initiating voice calls via the cellular base station transceiver systems;

the mobile telephone being adapted to utilize the controller and the cellular RF transceiver for selecting a cellular base station transceiver system for communication by:

scanning, via the cellular RF transceiver, to identify a plurality of cellular base station transceiver systems for communication including first and second cellular base station transceiver systems;

measuring, from the scanning, a first energy-to-interference ratio E_c/I_o of the first cellular base station transceiver system;

measuring, from the scanning, a second energy-to-interference ratio E_c/I_o of the second cellular base station transceiver system;

identifying that the first cellular base station transceiver system provides a Third Generation (3G) or greater communication service;

identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service but provides a communication service that is less than the 3G or greater communication service; and

if, as identified at the mobile telephone, the first energy-to-interference ratio E_c/I_o is greater than a minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o : causing the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system based at least in part on identifying that the first cellular base station transceiver system provides the 3G or greater communication service and the second cellular base station transceiver system fails to provide the 3G or greater communication service.

12. (Previously Presented) The mobile telephone of claim 11, wherein the second cellular base station transceiver system provides a Second Generation (2G) communication service.

13. (Previously Presented) The mobile telephone of claim 11, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for selecting the first cellular base station transceiver system for communication over the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold and is less than the second energy-to-interference ratio E_c/I_o .

14. (Previously Presented) The mobile telephone of claim 11, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

initially establishing communication with the second cellular base station transceiver system; and

facilitating a handoff to the first cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the signal quality is less than the second energy-to-interference ratio E_c/I_o .

15. (Previously Presented) The mobile telephone of claim 11, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

initially establishing communication with the first cellular base station transceiver system which provides the 3G or greater communication service; and

refraining from handing-off to the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o .

16. (Previously Presented) The mobile telephone of claim 11, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

producing and sending a list of one or more handoff candidate identifiers to a serving cellular base station transceiver system which excludes an identifier for the second cellular base station transceiver system, for causing the first cellular base station transceiver system to be selected for communication.

17. (Previously Presented) The mobile telephone of claim 11, which operates in accordance with Code Division Multiple Access (CDMA) for both the first and the second cellular base station transceiver systems.

18. (Previously Presented) A mobile station, comprising:
a controller;
cellular radio frequency (RF) transceiver circuitry coupled to the controller;
the cellular RF transceiver circuitry including a receiver and a transmitter;
the mobile station being adapted to utilize the controller and the cellular RF transceiver circuitry to select a cellular base station transceiver system for communication by:

scanning to identify one or more cellular base station transceiver systems for communication;

identify that at least a first cellular base station transceiver system identified from the scanning provides a Third Generation (3G) or greater communication service for the mobile station;

identifying that at least a second cellular base station transceiver system identified from the scanning fails to provide the 3G or greater communication service for the mobile station but provides a communication service that is less than the 3G or greater communication service; and

producing and sending a list of one or more handoff candidate identifiers to a serving cellular base station transceiver system which includes a first identifier for the first cellular base station transceiver system but excludes a second identifier for the second cellular base station transceiver system based on identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service for the mobile station.

19. (Previously Presented) The mobile station of claim 18, wherein the producing and sending are performed if, as identified at the mobile station, the first cellular base station transceiver system has a signal quality that is greater than a minimum threshold, even if the signal quality is less than that of the second cellular base station transceiver system.

20. (Previously Presented) The mobile station of claim 18, which is a mobile telephone configured for data communications and for operating in accordance with a circuit-switched voice service and a packet data service.

21. (Original) The mobile station of claim 18, wherein the list is sent as part of one of an origination message, a page response message, and a pilot strength measurement message.

22. (Previously Presented) The mobile station of claim 18, which operates in accordance with Code Division Multiple Access (CDMA) for both the first and the second cellular base station transceiver systems.

23. (Previously Presented) A communication system, comprising:
a first cellular network associated with a first cellular base station transceiver system;

a second cellular network associated with a second cellular base station transceiver system;

a mobile telephone configured for data communications and operative in accordance with a circuit-switched voice service and a packet data service, the mobile telephone including:

a controller;

a cellular radio frequency (RF) transceiver coupled to the controller;

the cellular RF transceiver including a receiver and a transmitter operative for communications with the first and the second cellular base station transceiver systems;

a user interface for use in initiating voice calls via the cellular base station transceiver systems;

the mobile telephone being adapted to utilize the controller and the cellular RF transceiver to select a cellular base station transceiver system for communication by:

scanning, via the cellular RF transceiver, to identify one or more cellular base station transceiver systems available for communication including the first and the second cellular base station transceiver systems;

measuring, from the scanning, a first energy-to-interference ratio E_c/I_o of the first cellular base station transceiver system;

measuring, from the scanning, a second energy-to-interference ratio E_c/I_o of the second cellular base station transceiver system;

identifying that the first cellular base station transceiver system provides a Third Generation (3G) or greater communication service;

identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service but provides a communication service that is less than the 3G or greater communication service; and

if, as identified at the mobile telephone, the first energy-to-interference ratio E_c/I_o is greater than a minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o : causing the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system based at least in part on identifying that the first cellular base station transceiver system provides the 3G or greater communication service and the second cellular base station transceiver system fails to provide the 3G or greater communication service.

24. (Previously Presented) The communication system of claim 23, wherein the second cellular base station transceiver system provides a Second Generation (2G) communication service.

25. (Previously Presented) The communication system of claim 23, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for selecting the first cellular base station transceiver system for

communication over the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold and the first energy-to-interference ratio E_c/I_o is less the second energy-to-interference ratio E_c/I_o .

26. (Previously Presented) The communication system of claim 23, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

initially establishing communication with the second cellular base station transceiver system; and

facilitating a handoff to the first cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less the second energy-to-interference ratio E_c/I_o .

27. (Previously Presented) The communication system of claim 23, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

initially establishing communication with the first cellular base station transceiver system which provides the 3G or greater communication service; and

refraining from handing-off to the second cellular base station transceiver system if the first energy-to-interference ratio E_c/I_o is greater than the minimum threshold, even if the first energy-to-interference ratio E_c/I_o is less than the second energy-to-interference ratio E_c/I_o .

28. (Previously Presented) The communication system of claim 23, wherein the mobile telephone is further adapted to utilize the controller and the cellular RF transceiver further for:

producing and sending a list of one or more handoff candidate identifiers to a serving cellular base station transceiver system which excludes an identifier for the second cellular base station transceiver system, for causing the first cellular base station transceiver system to be selected for communication.

29. (Previously Presented) The communication system of claim 23, wherein the first and the second cellular base station transceiver systems are compatible with Code Division Multiple Access (CDMA).

30. (Previously Presented) A communication system, comprising:
one or more cellular base station transceiver systems associated with one or more cellular communication networks;

a mobile station including:

a controller;

cellular radio frequency (RF) transceiver circuitry coupled to the controller;

the cellular RF transceiver circuitry including a receiver and a transmitter;

the mobile station using the controller and the cellular RF transceiver circuitry to select a cellular base station transceiver system for communication by:

scanning to identify the one or more cellular base station transceiver systems for communication which include at least first and second cellular base station transceiver systems;

identifying that the first cellular base station transceiver system provides a Third Generation (3G) or greater communication service for the mobile station;

identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service for the mobile station but provides a communication service that is less than the 3G or greater communication service; and

producing and sending a list of handoff candidate identifiers to a serving cellular base station transceiver system which includes a first identifier for the first cellular base station transceiver system but excludes a second identifier for the second cellular base station transceiver system based on identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service.

31. (Previously Presented) The communication system of claim 30, wherein the producing and sending are performed if, as identified at the mobile station, the first cellular base station transceiver system has a signal quality that is greater than a minimum threshold, even if the signal quality is less than that of the second cellular base station transceiver system

32. (Previously Presented) The communication system of claim 30, wherein the mobile station is a mobile telephone configured for data communications and operative in accordance with a circuit-switched voice service and a packet data service.

33. (Previously Presented) The communication system of claim 30, wherein the list is sent as part of one of an origination message, a page response message, and a pilot strength measurement message.

34. (Previously Presented) The communication system of claim 30, which is compatible with Code Division Multiple Access (CDMA).

35. (Previously Presented) The communication system of claim 30, wherein the serving cellular base station transceiver system utilizes the list of handoff candidate identifiers to select one of the cellular base station transceiver systems for communication with the mobile station.

36. (Previously Presented) The method of claim 1, further comprising:
receiving, via the cellular RF transceiver, a message or parameters from the first and the second cellular base station transceiver systems which identify whether or not the first and the second cellular base station transceiver systems provide the 3G or greater communication service.

37. (Previously Presented) The method of claim 1, further comprising:
if the first energy-to-interference ratio E_c/I_0 is less than the minimum threshold, causing the second cellular base station transceiver system to be selected for communication over the first cellular base station transceiver system; and
allowing a voice call to be established, via the cellular RF transceiver, through the selected first or second cellular base station transceiver system.

38. (Previously Presented) The mobile telephone of claim 11, which is further adapted to utilize the controller and the cellular RF transceiver for receiving a message or parameters from the first and the second cellular base station transceiver systems which identify whether or not the first and the second cellular base station transceiver systems provide the 3G or greater communication service.

39. (Previously Presented) The mobile telephone of claim 11, further comprising:

if the first energy-to-interference ratio E_c/I_0 is less than the minimum threshold, causing the second cellular base station transceiver system to be selected for communication over the first cellular base station transceiver system; and

allowing a voice call to be established, via the cellular RF transceiver, through the selected first or second cellular base station transceiver system.